APR14-2014-020075

Abstract for an Invited Paper for the APR14 Meeting of the American Physical Society

## **Driving Extreme Efficiency to Market**<sup>1</sup> KARINA GARBESI, Lawrence Berkeley National Laboratory

The rapid development of extremely energy efficient appliances and equipment is essential to curtail catastrophic climate disruption. This will require the on-going development of products that apply all best-practices and that take advantage of the synergies of hybridization and building integration. Beyond that, it requires the development of new disruptive technologies and concepts. To facilitate these goals, in 2011 the Lawrence Berkeley National Laboratory and the U.S. Department of Energy launched the *Max Tech and Beyond Design Competition for Ultra-Low-Energy-Use Appliances and Equipment*. Now in its third year, the competition supports faculty-lead student design teams at U.S. universities to develop and test new technology prototypes. This talk describes what the competition and the Max Tech Program are doing to drive such rapid technology progress and to facilitate the entry to the market of successful Max Tech prototypes. The talk also initiates a discussion of physicists' unique role in driving that technology progress faster and farther.

<sup>1</sup>Emerging Technologies, Building Technologies Office, U.S. Department of Energy